

COASTAL CONSERVANCY

Staff Recommendation

March 24, 2016

INVASIVE SPARTINA PROJECT

99-054-01, 99-054-02

Project Manager: Marilyn Latta

RECOMMENDED ACTION: Authorization to disburse up to \$4,100,000, of which \$3,000,000 will be reimbursed by a grant from the California Department of Fish and Wildlife, for planning, management, treatment, monitoring, and restoration activities to implement the Invasive *Spartina* Project within the San Francisco Estuary from 2016-2019.

LOCATION: The baylands and lower creek channels of the nine counties that bound the San Francisco Bay.

PROGRAM CATEGORY: San Francisco Bay Area Conservancy

EXHIBITS

Exhibit 1: [March 26, 2015 Staff Recommendation](#)

Exhibit 2: [Change in Net Non-native *Spartina* cover since 2004](#)

Exhibit 3: [June 26, 2015 ISP Memo Re: Review of the ISP Treatment Program for CEQA Impact and Mitigation.](#) [Due to size of file, e-version posted on the Conservancy website, but not reproduced in hard copy].

Exhibit 4: [Project Letters](#)

RESOLUTION AND FINDINGS:

Staff recommends that the State Coastal Conservancy adopt the following resolution pursuant to Chapter 4.5 of Division 21 of the Public Resources Code:

“The State Coastal Conservancy hereby authorizes the disbursement of up to \$4,100,000, of which \$3,000,000 will be reimbursed by a grant from the California Department of Fish and Wildlife, for planning, management, treatment, monitoring, and restoration activities to implement the San Francisco Estuary Invasive *Spartina* Project from 2016-2019, allocated as follows:

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1. Approximately \$3,350,000 (three million three hundred fifty thousand dollars) for Conservancy contracts for planning, management, pre-implementation work and monitoring for treatment and eradication projects and for revegetation projects.
2. Approximately \$300,000 (three hundred thousand dollars) for ongoing invasive and hybrid *Spartina* treatment and eradication projects through 2019 (or in subsequent years). These funds will be used to augment an existing grant to the California Wildlife Foundation.
3. Approximately \$450,000 (four hundred fifty thousand dollars) for ongoing native revegetation projects through 2019 (or in subsequent years). These funds may be used to augment an existing grant to the California Wildlife Foundation or for a grant to a public entity or to a nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, and whose purposes are consistent with Division 21 of the California Public Resources Code.

Any grant of funds for treatment and eradication or revegetation shall be subject to the following conditions:

- a. Prior to implementing any treatment and eradication or revegetation project and prior to disbursement of any funds to the grantee, the grantee shall submit for review and approval of the Executive Officer: a final plan detailing the site-specific work for 2016 and subsequent years, based on the outcome and extent of the prior year's treatment or revegetation results, and including a list of identified mitigation measures; an annual work program for treatment or revegetation, including a schedule and budget; and evidence that the grantee has obtained all necessary permits and approvals for the project.
- b. In carrying out any treatment or revegetation project, the grantee shall comply with all applicable mitigation and monitoring measures that are set forth in the approved site-specific plans, that are required by any permit, the applicable U.S. Fish and Wildlife Service Biological Opinion or any other approval for the project, and that are identified in the "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program" (EIS/R), adopted by the Conservancy on September 25, 2003".

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Staff further recommends that the Conservancy adopt the following findings:

“Based on the accompanying staff report and attached exhibits, the State Coastal Conservancy hereby finds that:

1. Disbursement of additional funds for the Invasive *Spartina* Project treatment and eradication projects, and planning and management, remains consistent with Public Resources Code Sections 31160-31165.
2. The proposed authorization remains consistent with the Project Selection Criteria and Guidelines last updated by the Conservancy on October 2, 2014.
3. The proposed authorization is consistent with the current Conservancy Project Selection Criteria and Guidelines.
4. No new environmental documentation is required for the activities under the proposed authorization, since the activities are within the scope of the EIS/R, and, pursuant to CEQA Guidelines Section 15162 (14 Cal. Code Regs. § 15162), do not involve any new effects or new mitigation measures beyond those identified in the EIS/R.
5. The California Wildlife Foundation is a nonprofit organization existing under Section 501(c)(3) of the United States Internal Revenue Code, and whose purposes are consistent with Division 21 of the California Public Resources Code.”

PROJECT SUMMARY:

The purpose of the Conservancy’s Invasive *Spartina* Project (ISP) is to eradicate invasive *Spartina* in order to protect the long-term health of the native marsh ecosystem and restore the affected habitats of the San Francisco Estuary. The ISP comprises two primary components: 1) environmental consulting services to provide program planning, management, pre-implementation work and monitoring activities, primarily permit acquisition and compliance; and 2) grants to carry out treatment and restoration activities.

ISP has been broadly successful in eradicating *Spartina*, since the commencement of treatment and control activities in 2005. Exhibit 2 summarizes the reduction in the area of non-native *Spartina* since the first full season of effective treatment ten years ago. The net area of invasive *Spartina* is currently down to 28 net acres, a 97% reduction since the peak in 2005. Annual monitoring and treatment activities are conducted towards the goal of eradication.

In order to address loss of rail habitat, the Conservancy launched an ambitious habitat revegetation and enhancement program in 2011, and has been working closely with the United States Fish and Wildlife Service (FWS) and dozens of landowning and technical partners to successfully plan and implement tidal marsh revegetation as a post-treatment action. The project will continue this work in winter 2016-17, with an ultimate expectation of enhancing up to 38 marshes and 650 total acres with 500,000 total native plants to benefit California Ridgway’s Rails and many other species. In addition to the revegetation work, the program is developing and implementing innovative techniques to replace the lost structure of the non-native and hybrid *Spartina* forms, and enhance habitat through the installation of artificial floating nesting islands

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and construction of high tide refuge islands to provide better high tide habitat for Ridgway's rail. The program worked with FWS to design earthen high tide refuge islands, acquire permits, and construct and plant 61 pilot earthen high tide refuge islands in 2012-2016 (See Exhibit 1).

In January 2016, the California Department of Fish and Wildlife (CDFW) announced the award of a \$3,000,000 grant to the Conservancy for ISP activities from June 2016 through September of 2019. The CDFW grant requires that the Conservancy provide a total of \$2,000,000 in new, matching funds for the ISP activities. Depending on various factors, the total of \$5,000,000 (CDFW grant plus matching funds) is the minimum that staff anticipates will be needed to meet all ISP activities through 2019. Thus, the proposed authorization to disburse the full CDFW grant funds and \$1,100,000 in matching Conservancy funds covers roughly half of the matching funds and covers a majority, but not all, of the anticipated ISP program costs through 2019. Conservancy staff intends to continue fundraising from outside sources to meet the additional needed funding. In the future, staff will seek Conservancy authorization for additional funding needed to support full project costs through 2019 and to meet the CDFW grant match requirements.

This authorization will enable the Conservancy to continue ongoing planning, management, monitoring, and permit compliance activities needed to support a portion of treatment and revegetation activities through September 30, 2019, as follows:

1. Planning and Management Consulting Services

These services were initiated in 2003 and are ongoing under existing contract. Conservancy staff recommends continuing environmental services necessary to plan and support invasive *Spartina* treatment and eradication, from April 1, 2016 through September 30, 2019, including the following:

- Planning, coordinating, and managing invasive *Spartina* treatment at all sites that the FWS has approved for treatment (currently 24 sites with 210 sub-areas), including overseeing and monitoring treatment to efficiently locate and kill remaining plants and achieve eradication at each site;
- Conducting annual surveys for the endangered Ridgway's rail (formerly the "California Clapper Rail") at 152 sub-areas to provide data required by FWS and to assess the effect of invasive *Spartina* eradication on the rail population;
- Planning and managing a large, highly effective and FWS-approved tidal marsh revegetation program to rapidly enhance habitat for the Ridgway's rail, to help allow treatment to be resumed and completed at 10 sub-areas where treatment is currently not authorized and one sub-area with limited authorization (seed suppression) (see below for more information);
- Conducting annual inventories of potential invasive *Spartina* habitat, including collecting and analyzing plant samples to determine genetic composition where needed, to map the location of remaining invasive *Spartina* plants at treated sites and to assure that new

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populations of invasive *Spartina* are identified and treated as quickly as possible and to prevent further spread; and

- Collecting and analyzing water samples at 1-5 representative sites to confirm that there is no impact to water quality from herbicide residue and to comply with state and federal regulations (e.g., Non-Point Discharge Elimination System permits required by the U.S. Environmental Protection Agency).

The total proposed funding for these activities is \$3,350,000.00.

2. Treatment and Revegetation

The Conservancy authorized funding for treatment activities starting in 2003, and restoration activities starting in 2011. Existing (or new) grantees will continue to implement site-specific control plans (see Exhibit 4) prepared after consultation at sites with FWS under a current FWS Biological Opinion. Treatment methods employed may include, singly or in combination: manual removal (hand digging and covering of plants); mechanical removal (discing); herbicide application via manual methods (accessing wetland sites by foot, truck, or amphibious vehicle and applying herbicide via backpack sprayers and direct application to plants), broad-scale herbicide application techniques via mechanical methods (application of herbicide via amphibious vehicles, airboats, and helicopter spraying); and a combination of sub-lethal mechanical removal plus herbicide application (seed suppression).

The proposed authorization will enable the grantees to undertake additional treatment and restoration work through September 2019. The total proposed funding from this authorization for these activities is \$750,000.

PROJECT HISTORY

The Conservancy first approved funding for the ISP in September 2003 (see Exhibit 1), when it also certified a Final Programmatic Environmental Impact Statement/ Report for the project. Conservancy approval was premised on the principle that controlling invasive *Spartina* was “critical to the long-term health of the San Francisco Estuary, and to the species which inhabit and rely upon the salt marshes and tidal flats along its perimeters,” and that the unchecked spread of invasive *Spartina* in the Estuary could cause failure of tidal restoration efforts underway by the Conservancy and others (e.g., the South Bay Salt Pond Restoration Project).

Since its initial authorization, prior to the current proposed authorization, the Conservancy has authorized a total of \$10,234,034 in Conservancy funds (see Exhibit 3). The project has received almost twice that amount (\$19,965,176) from other sources, including the Wildlife Conservation Board (\$10,404,968), CALFED Bay Delta Program (\$3,980,657), the National Oceanic and Atmospheric Administration under the American Recovery and Reinvestment Act of 2009 (\$1,734,522), the FWS under the National Coastal Wetlands Conservation Program (\$1,000,000) and under the North American Wetlands Conservation Act grant program (\$1,000,000), the Port of Oakland (\$684,412), the U.S. Minerals Management Services Coastal Impact Assistance Program (\$661,679), the U.S. Environmental Protection Agency/Association of Bay Area Governments (\$165,464), and other grant sources (\$333,474). These outside fund sources have covered approximately \$510,000 of Conservancy staff time to provide support for the project.

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Conservancy staff participation has continued to be critical to ensuring thoughtful and strong technical oversight of this complex regional project involving multiple contractors, grantees, and dozens of regional collaborators bay-wide.

The ISP has become a successful, region-wide model for treating an invasive species with multiple landowner and agency participants in all nine counties of the San Francisco Bay Area. The first few years of the project's efforts focused on preparing environmental compliance documents, finding and mapping invasive *Spartina* populations, acquiring permits, developing an extensive network of participating entities, testing treatment methods, and developing site specific plans. Full-scale treatment was initiated in 2005, by which time the invasion had spread to over 800 net acres. Between 2005 and 2015, the project has successfully eliminated more than 776 net acres (97%) of invasive *Spartina* from over 25,000 acres of infested tidal marsh and 25,000 acres of mudflats bay-wide.

In 2011, FWS became concerned that rapid removal of invasive *Spartina* from some areas may have contributed to a decline in populations of the Ridgway's rail, an endangered bird which had come to use tall, dense stands of hybrid *Spartina*. As a result, the 2011-2015 Biological Opinions issued by FWS did not authorize treatment at all sites, imposed timing and method restrictions at other sites, and required the Conservancy to develop and implement a plan to rapidly enhance Ridgway's rail support at treated sites through aggressive revegetation and other means. In 2011 the Conservancy authorized \$650,000 for the effort, and it was implemented throughout 2011-2014, and ongoing. The Conservancy has also received a total of \$3,284,412 of funds from the Port of Oakland, WCB, and FWS to aid in this work and has applied for additional grant funds.

PROJECT FINANCING

State Coastal Conservancy	\$1,100,000
California Department of Fish and Wildlife	<u>\$3,000,000</u>
Total Authorization	\$4,100,000

It is anticipated that \$1,100,000 of the proposed funding will come from appropriations to the Conservancy from the "Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006" (Proposition 84, Public Resources Code Section 75001, et seq). This funding source may be used for the protection of bays and coastal waters, including projects to protect and restore the natural habitat values of coastal waters and lands, pursuant to the Conservancy's enabling legislation, Division 21 of the Public Resources Code. (Public Resources Code Section 75060.) The proposed project serves to restore natural habitat values of the San Francisco Bay watershed. In addition, as discussed below, the project is consistent with Chapter 4.5 of Division 21.

Proposition 84 requires that for restoration projects that protect natural resources, the Conservancy shall give priority to restoration projects that demonstrate one or more of the

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characteristics specified in Public Resources Code Section 75071(a)-(e). The ISP satisfies 3 of the specified criteria, as follows: (a) Landscape/Habitat Linkages: the areas that are restored through the removal of invasive *Spartina* are areas that link to, or contribute to linking, existing protected areas with other large blocks of protected habitat; (b) Watershed Protection: the project serves to protect and restore the natural resources of the San Francisco Bay and Estuary, a priority watershed as identified by the Natural Resources Agency; and (c) Under-protected habitats: the project is focused on relatively large areas of intertidal mudflats, tidal marshes and wetlands that are under-protected major habitat types.

The \$3,000,000 in CDFW funding was recently awarded to the Conservancy under CDFW's Watershed Restoration & Delta Water Quality and Ecosystem Restoration (Proposition 1) Grant Program. CDFW awarded the funds specifically for the ongoing implementation of the Invasive *Spartina* Project through 2019, including the planning and coordination services and the treatment and eradication and revegetation projects described above.

CONSISTENCY WITH CONSERVANCY'S ENABLING LEGISLATION:

As detailed in the March 26, 2015 staff recommendation (Exhibit 1), the ISP remains consistent with Chapter 4.5 of Division 21 of the Public Resources Code, Sections 31160-31165.

CONSISTENCY WITH CONSERVANCY'S 2013 STRATEGIC PLAN GOAL(S) & OBJECTIVE(S), AS REVISED JUNE 25, 2015:

Consistent with **Goal 7, Objective D** of the Conservancy's 2013-18 Strategic Plan, the proposed project will install high tide refuge islands and artificial floating nesting islands for Ridgway's rail, which helps to implement adaptation pilot projects that reduce hazards from sea level rise and extreme storm events, and which protect natural resources and maximize public benefits.

Consistent with **Goal 11, Objective G** of the Conservancy's 2013-18 Strategic Plan, the proposed project will develop plans to eradicate non-native invasive species that threaten important habitats in the San Francisco Bay Area.

Consistent with **Goal 11, Objective H** of the Conservancy's 2013-18 Strategic Plan, the proposed project will eradicate non-native invasive species that threaten important habitats in the San Francisco Bay Area.

CONSISTENCY WITH CONSERVANCY'S PROJECT SELECTION CRITERIA & GUIDELINES:

The proposed authorization, which provides additional funding for the ISP, remains consistent with the Conservancy's Project Selection Criteria and Guidelines, adopted October 2, 2014, as described in detail in the March 25, 2015 staff recommendation (Exhibit 1).

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CONSISTENCY WITH SAN FRANCISCO BAY PLAN:

The ISP remains consistent with the San Francisco Bay Conservation and Development Commission's "San Francisco Bay Plan", as described in the March 26, 2015 staff recommendation (Exhibit 1).

COMPLIANCE WITH CEQA:

As detailed in the March 26, 2015 Conservancy staff recommendation (Exhibit 1), at its June 16, 2005 meeting the Conservancy authorized initial funding for treatment and eradication of invasive *Spartina* at 22 project sites and certified a "Final Programmatic Environmental Impact Statement/Environmental Impact Report, San Francisco Estuary Invasive *Spartina* Project: *Spartina* Control Program" (FEIS/R), prepared for the ISP pursuant to the California Environmental Quality Act (CEQA). Subsequently, through the 2015 treatment season, the Conservancy has authorized funding for treatment and eradication projects at all of the sites now being proposed for future 2016-19 activities. In general, over the duration of the ISP Control Program, the nature, duration, scope, location and site characteristics of treatment has not changed. Over time, some additional sites and sub-areas have been added as new plants were found but treatment and potential impacts have been reduced because of successful treatment in prior years.

The FEIS/R is a *programmatic* environmental impact report (Section 15168 of the CEQA Guidelines, 14 Cal. Code of Regulations, Sections 15000 *et seq.*, hereafter "Guidelines") in that it analyzes the potential environmental effects of implementing the ISP Control Program as a whole, rather than the effects of any one or more individual treatment and eradication projects. The program-level FEIS/R identifies mitigation measures that will be applied to reduce or eliminate impacts at various treatment locations, under varying site characteristics and conditions, and using varying methods of treatment.

A subsequent activity that follows under a programmatic environmental impact report that has been assessed and certified pursuant to CEQA (such as the FEIS/R) must be examined in the light of that programmatic report to determine whether an additional environmental document must be prepared. If the agency proposing the later activity finds that the environmental impacts of the later activity and the required mitigation to reduce those impacts were already identified and considered under the program environmental report, the activity can be approved with no further environmental documentation. (CEQA Guidelines, Section 15168(c)). The Guidelines suggest the use of a written checklist or similar device to document the evaluation of the activity to determine whether the environmental effects of the operation were covered in the program environmental impact report.

Whenever additional funding for the ISP Control Program treatment has been sought, the Conservancy staff has assessed the proposed treatment using, as the "checklist" suggested by the CEQA Guidelines, site specific plans for each treatment site and mitigation matrices to identify the impacts and required mitigation needed to avoid or reduce those impacts. Based on that information, the Conservancy has concluded in each instance that the environmental effects

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associated with proposed treatment and the required mitigation to reduce those effects to less than significant level had been fully considered under the FEIS/R. For purposes of 2016-19 treatment under this proposed authorization, staff has reached the same conclusion.

For purposes of the 2016 treatment season and subsequent years, the nature, duration, scope, location and site characteristics of the proposed treatment and control work have not changed. Eradication and control efforts will continue in the same areas as in 2015, but at a decreased intensity because of the reduction in invasive *Spartina* removed in 2015. Thus, the 2015 matrix of impacts and mitigation measures (Exhibit 3) continues to apply to and fully detail the impacts and needed mitigation measures for the activities to be undertaken in 2016 and subsequent years under the new funding proposed by this staff recommendation. The matrix also serves to demonstrate that, since there are no new activities and the project remains essentially unchanged, the proposed treatment and control activities in 2016 and subsequent years will involve only those potential impacts previously identified by the FEIS/R and will not require any new or different mitigation beyond that required by the FEIS/R to avoid or reduce those potential impacts.

Since the project activities proposed for funding under this authorization, including the potential environmental impacts and required mitigation measures, remain unchanged, the proposed authorization remains consistent with the CEQA findings adopted by the Conservancy in connection with the June 16, 2005 authorization for the 22 original treatment sites and with subsequent Conservancy findings made in connection with authorizations for treatment at the new sites added over the years. No further environmental documentation for these treatment activities is required under CEQA.